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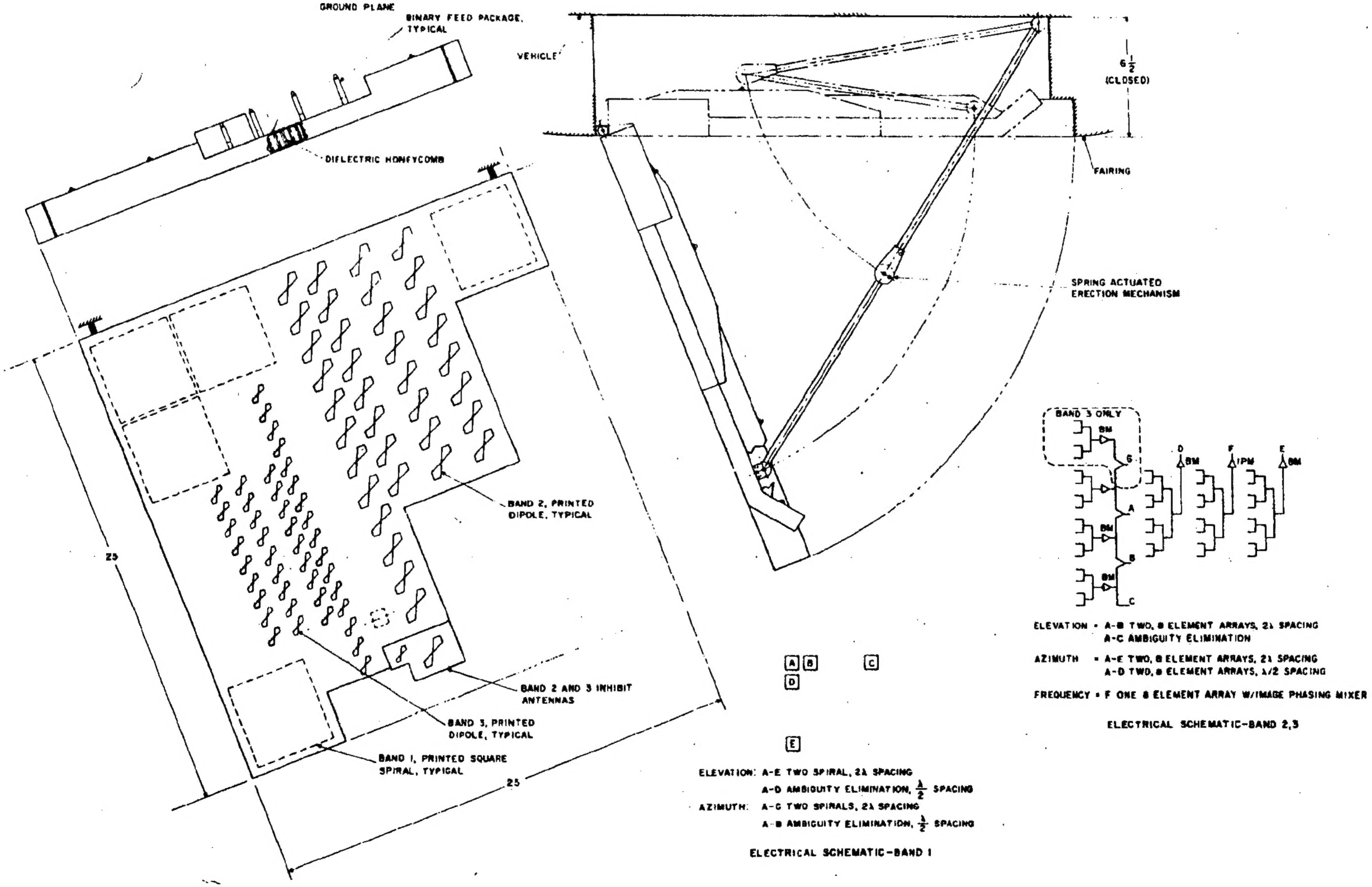
GROUND PLANE
BINARY FEED PACKAGE, TYPICAL
DIELECTRIC HONEYCOMB
VEHICLE
6 1/2 (CLOSED)
FAIRING
SPRING ACTUATED ERECTION MECHANISM
BAND 2, PRINTED DIPOLE, TYPICAL
BAND 2 AND 3 INHIBIT ANTENNAS
BAND 3, PRINTED DIPOLE, TYPICAL
BAND 1, PRINTED SQUARE SPIRAL, TYPICAL
25
25
A
B
C
D
E
ELEVATION: A-E TWO SPIRAL, 2λ SPACING
A-D AMBIGUITY ELIMINATION, λ/2 SPACING
AZIMUTH: A-C TWO SPIRALS, 2λ SPACING
A-B AMBIGUITY ELIMINATION, λ/2 SPACING
ELECTRICAL SCHEMATIC-BAND 1
BAND 3 ONLY
BM
G
D
BM
F
IPM
E
BM
A
BM
B
BM
C
ELEVATION = A-B TWO, 8 ELEMENT ARRAYS, 2λ SPACING
A-C AMBIGUITY ELIMINATION
AZIMUTH = A-E TWO, 8 ELEMENT ARRAYS, 2λ SPACING
A-D TWO, 8 ELEMENT ARRAYS, λ/2 SPACING
FREQUENCY = F ONE 8 ELEMENT ARRAY W/IMAGE PHASING MIXER
ELECTRICAL SCHEMATIC-BAND 2,3

Figure 6-3. Experiment P-4 Acquisition Antenna Elements

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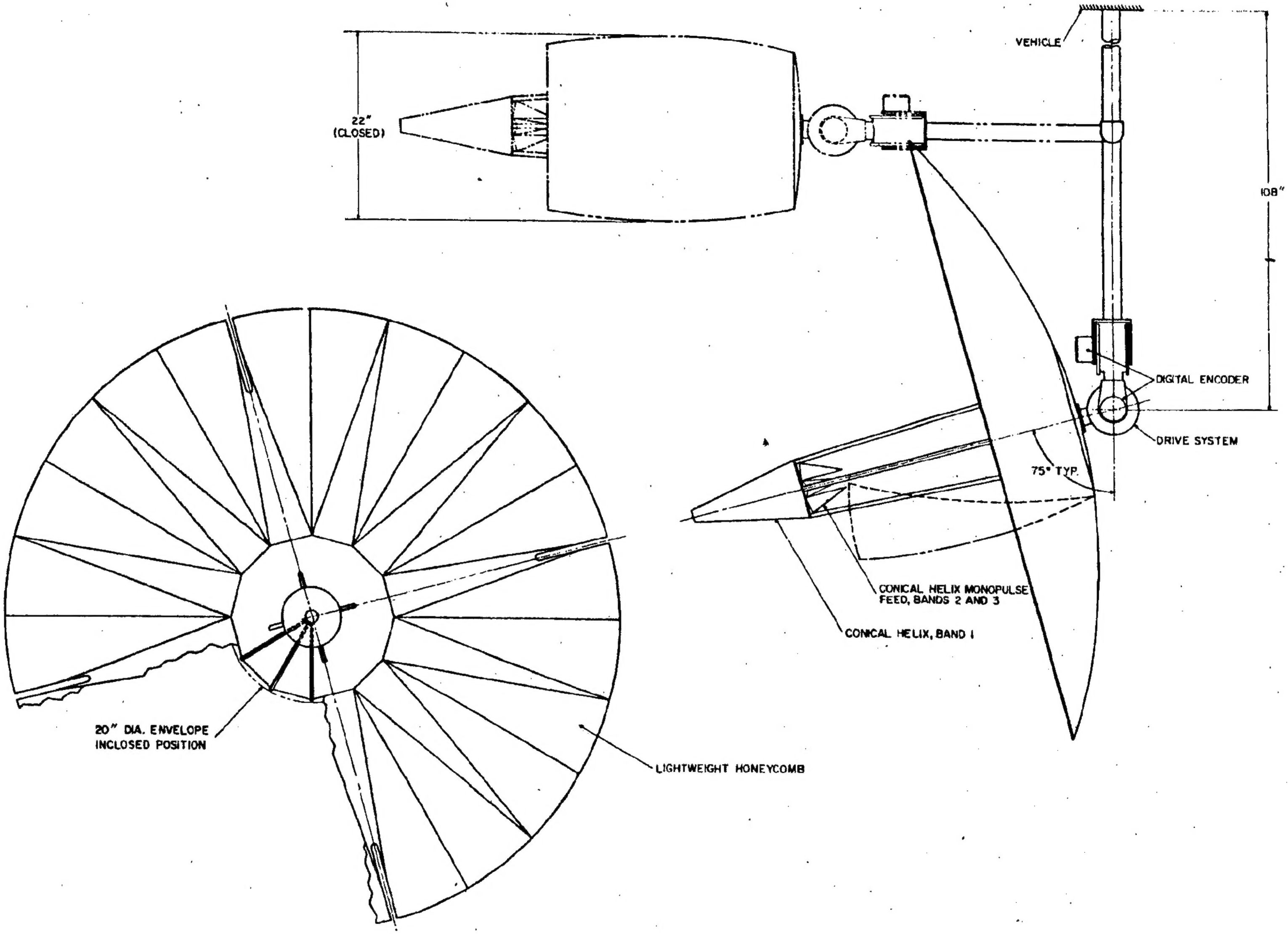

Figure 6-4. Experiment P-4 Proposed Tracking Antenna

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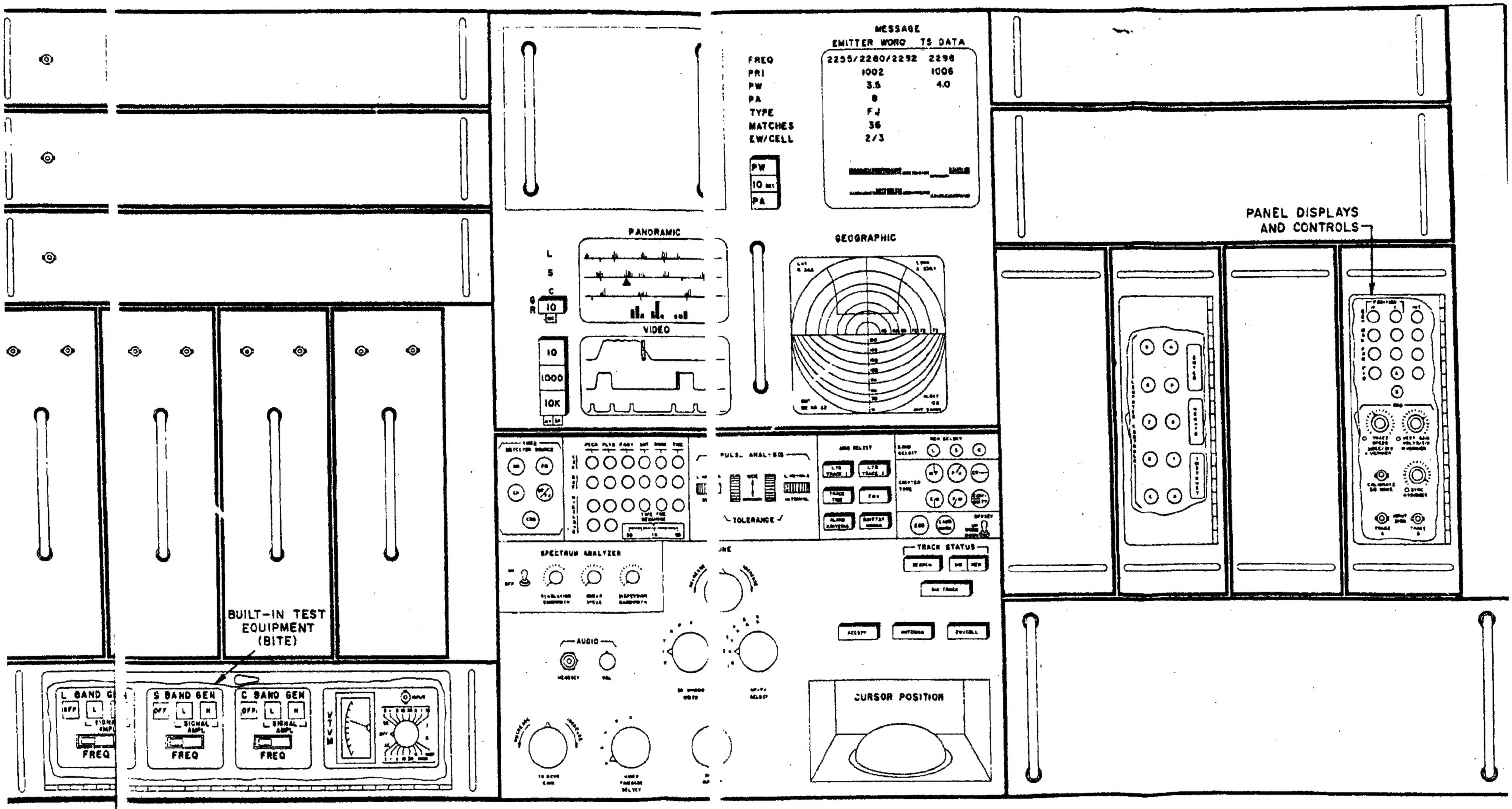

Figure 6-5. Experiment P-4 Equipment Arrangement

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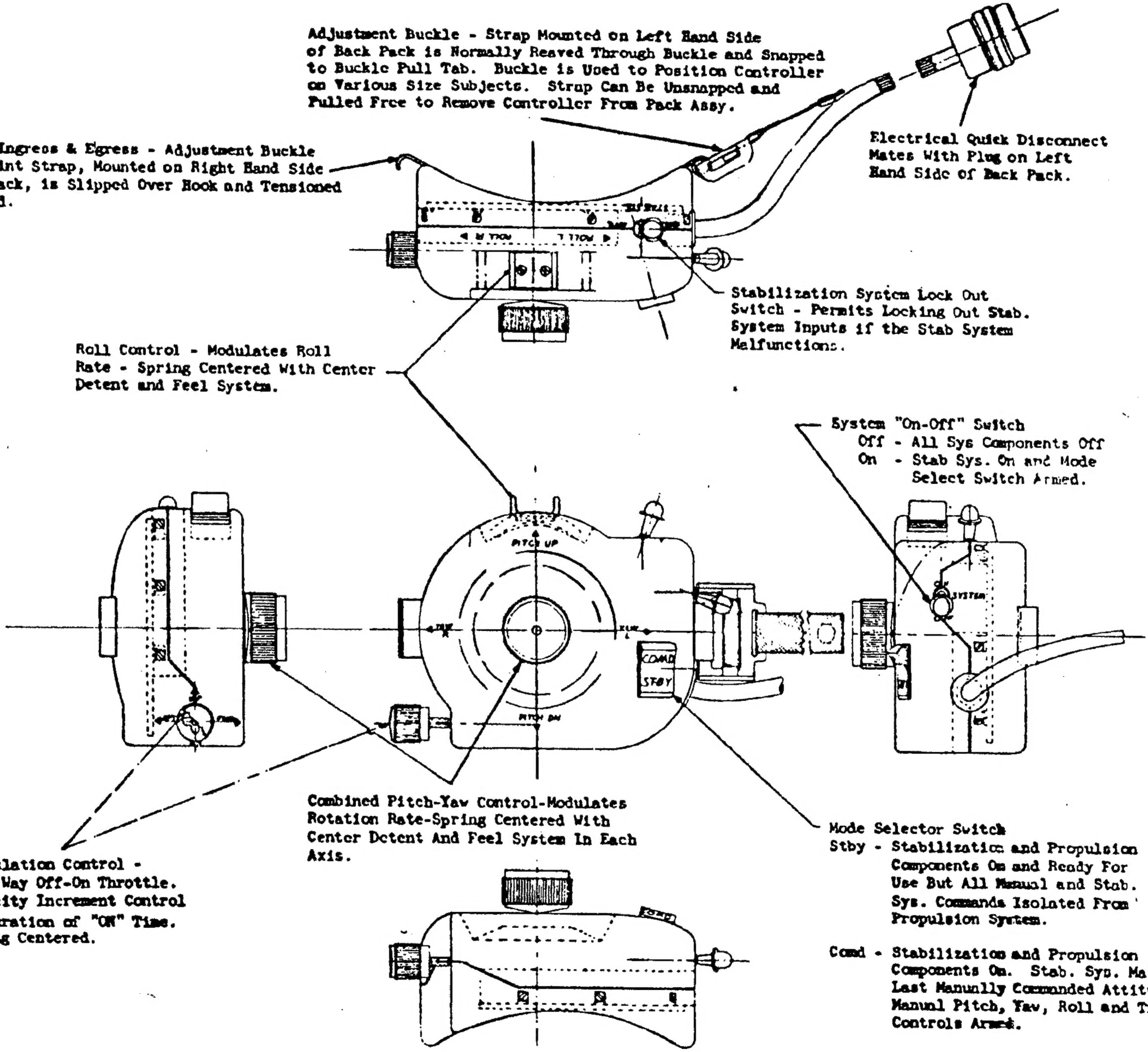

Adjustment Buckle - Strap Mounted on Left Hand Side of Back Pack is Normally Reaved Through Buckle and Snapped to Buckle Pull Tab. Buckle is Used to Position Controller on Various Size Subjects. Strap Can Be Unsnapped and Pulled Free to Remove Controller From Pack Assy.

Hook For Ingress & Egress - Adjustment Buckle on Restraint Strap, Mounted on Right Hand Side of Back Pack, is Slipped Over Hook and Tensioned as Desired.

Electrical Quick Disconnect Mates With Plug on Left Hand Side of Back Pack.

Stabilization System Lock Out Switch - Permits Locking Out Stab. System Inputs if the Stab System Malfunctions.

Roll Control - Modulates Roll Rate - Spring Centered With Center Detent and Feel System.

System "On-Off" Switch
Off - All Sys Components Off
On - Stab Sys. On and Mode Select Switch Armed.

Combined Pitch-Yaw Control-Modulates Rotation Rate-Spring Centered With Center Detent And Feel System In Each Axis.

Translation Control - Four Way Off-On Throttle. Velocity Increment Control By Duration of "ON" Time. Spring Centered.

Mode Selector Switch
Stby - Stabilization and Propulsion Components On and Ready For Use But All Manual and Stab. Sys. Commands Isolated From Propulsion System.

Comd - Stabilization and Propulsion Components On. Stab. Sys. Maintains Last Manually Commanded Attitude. Manual Pitch, Yaw, Roll and Translation Controls Armed.

Figure 8-2. Typical AMU Manual Controller

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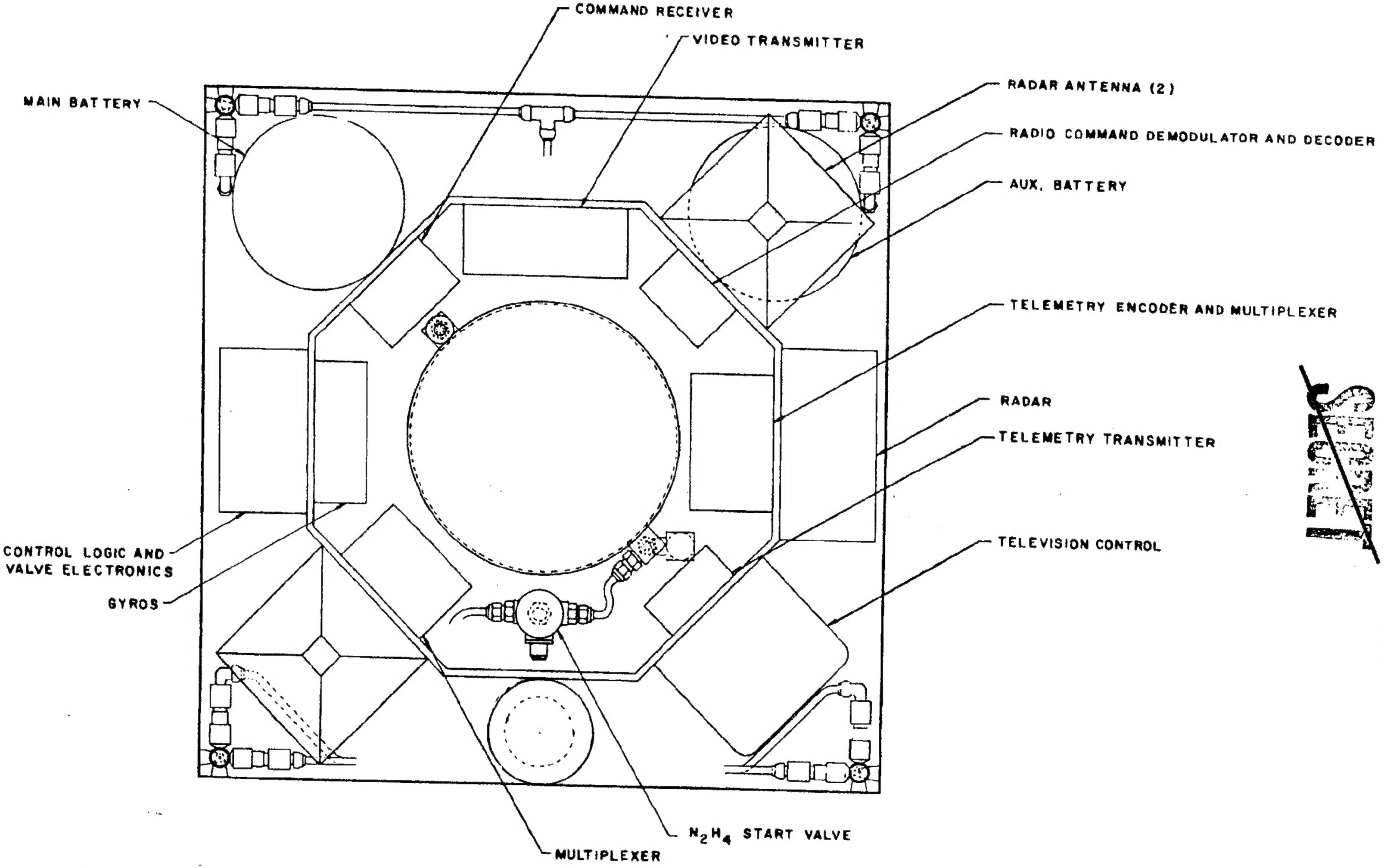

Figure 9-3. RMU Arrangement

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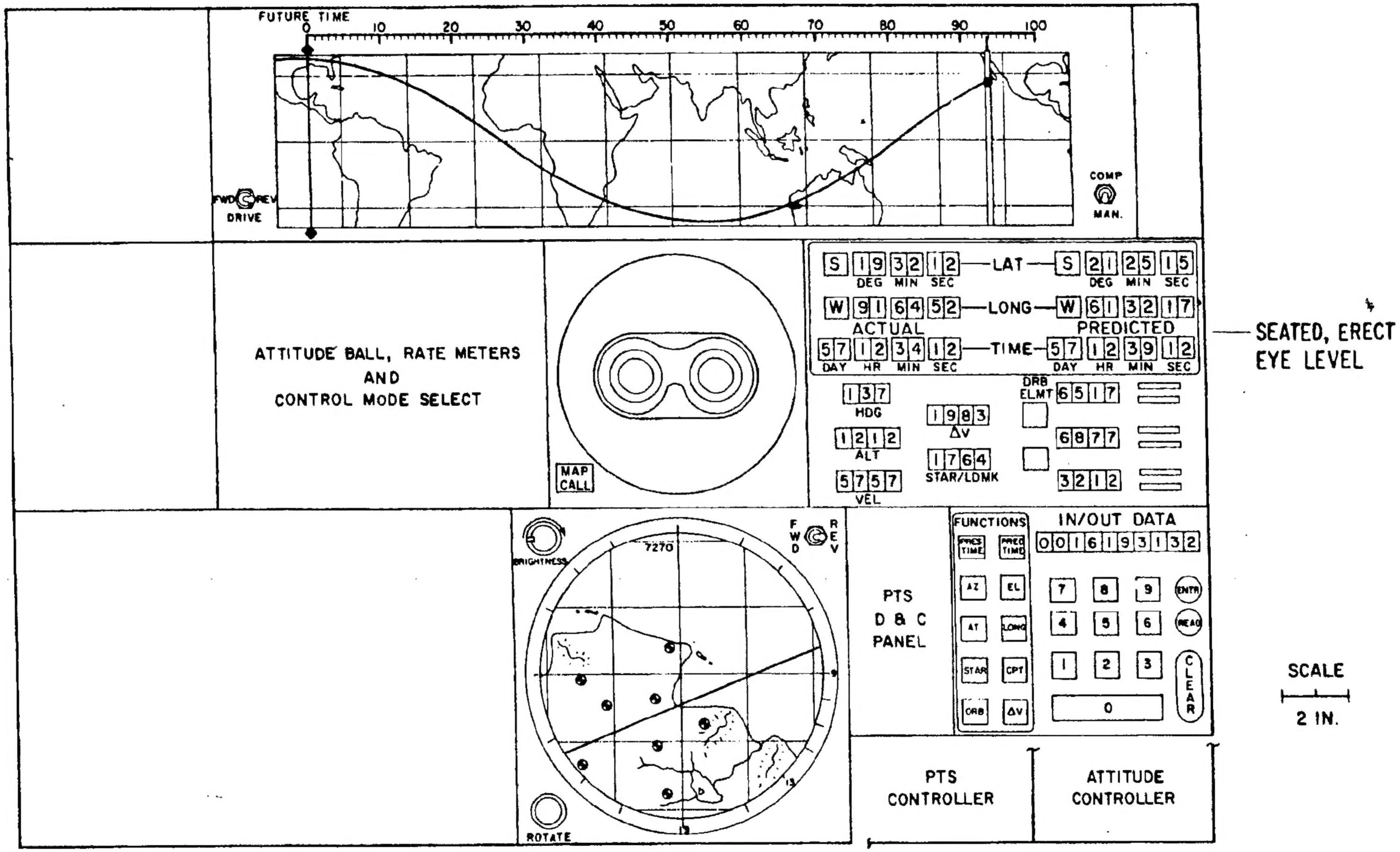

Figure 10-4. Preliminary MOL Autonomous Navigation Display and Control

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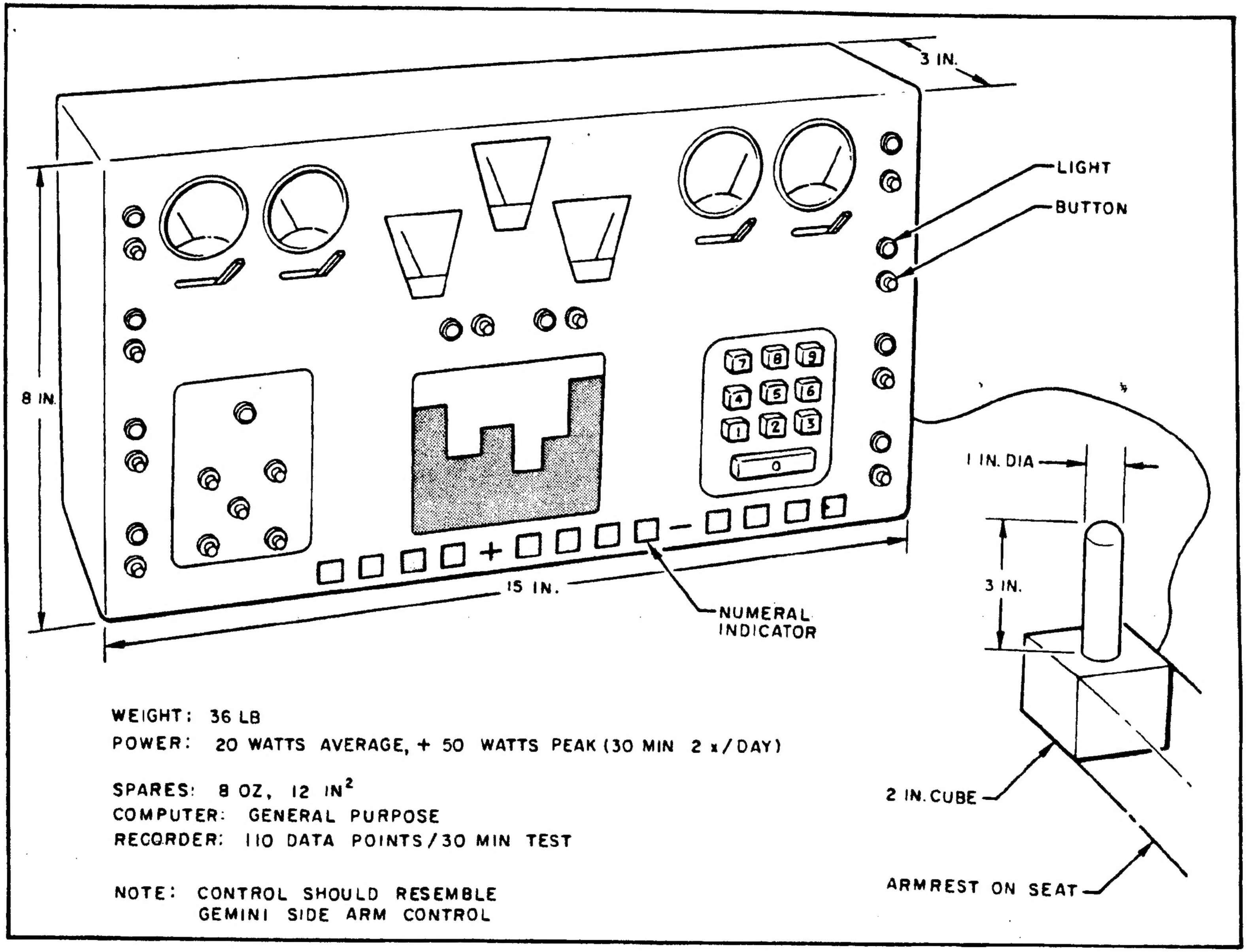

WEIGHT: 36 LB
POWER: 20 WATTS AVERAGE, + 50 WATTS PEAK (30 MIN 2 x/DAY)

SPARES: 8 OZ, 12 IN^2
COMPUTER: GENERAL PURPOSE
RECORDER: 110 DATA POINTS/30 MIN TEST

NOTE: CONTROL SHOULD RESEMBLE GEMINI SIDE ARM CONTROL

Figure 13-1. Preliminary Sketch of Equipment for P-11

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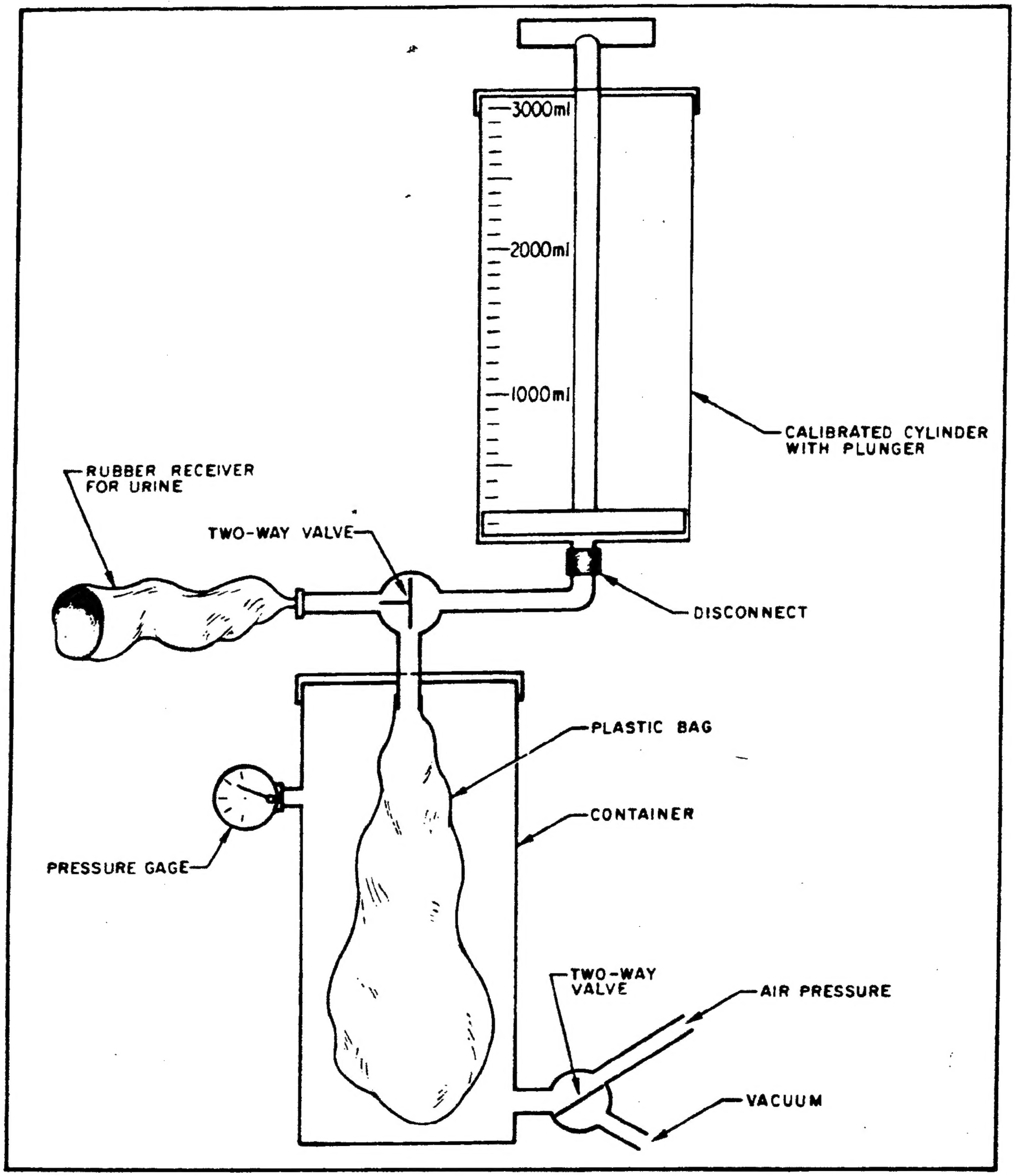

Figure 14-5. Device for Collecting Urine and Measuring Urine Volume

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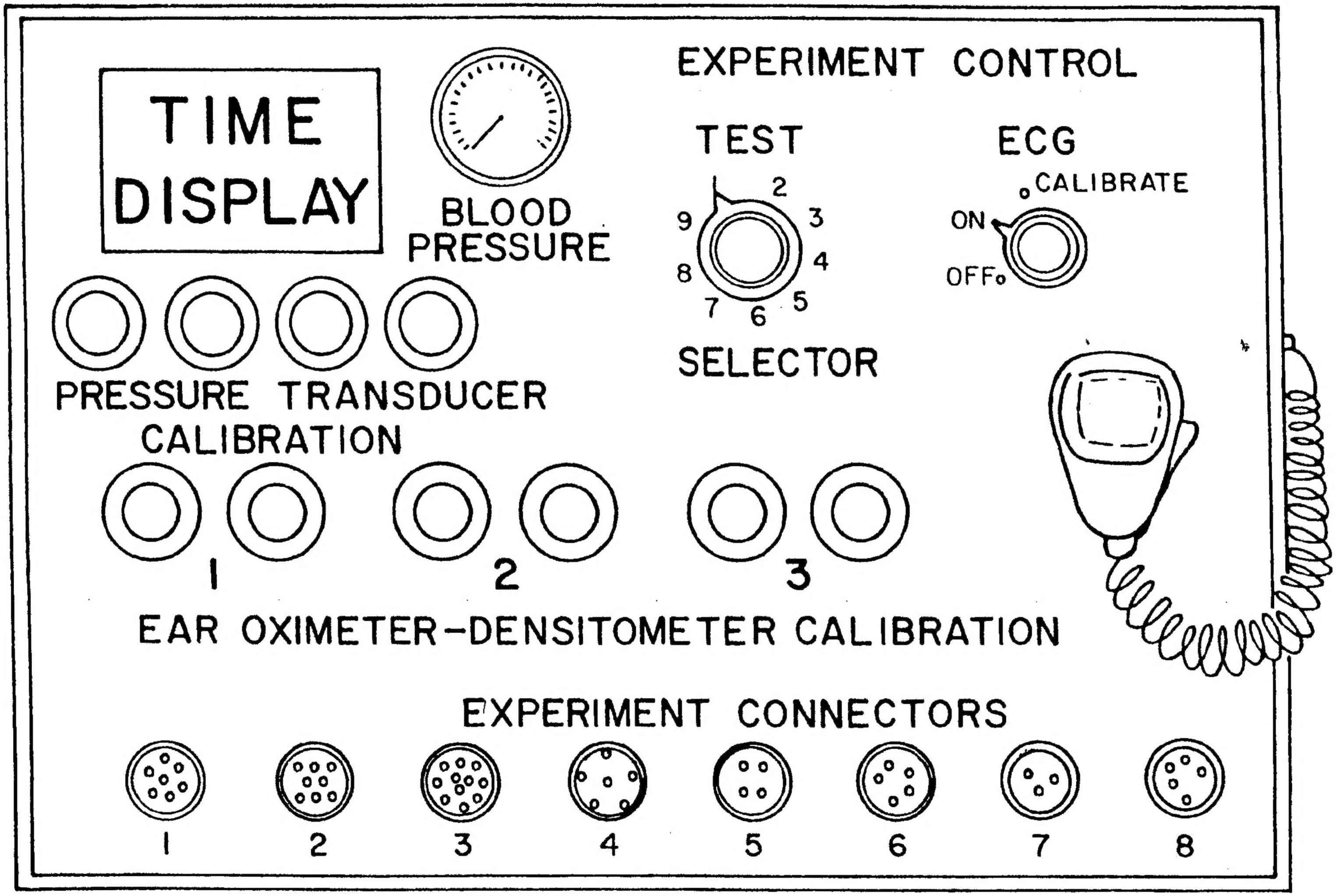

Figure 14-6. Medical Experiment Control Panel

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